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Impact of Leadership Development Workshops in Facilitating Team-Based Practice Transformation

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Abstract

The development of interprofessional collaborative practice (IPCP) environments requires a systematic, multi-pronged approach. Despite recognition of the need for IPCP, interventions that support its development are not well described in the literature. Leadership training is necessary for individuals and teams to build IPCP-supportive environments. This study describes the impact of a longitudinal series of leadership development workshops to strengthen IPCP and facilitate practice transformation. Semi-structured interviews were conducted with 16 healthcare professionals who described ways in which the workshops influenced the team-based practice transformation. change process. Thematic analysis indicated that the workshops were instrumental in providing structure and opportunity for participants to learn skills, expand perspectives, and change behavior to improve team outcomes. Findings highlight the importance of supporting individual and team development over time and suggest that intentional, targeted coaching focused on relationship building and meeting the evolving needs of the team is critical to the implementation and sustainment of practice change.

Keywords

Interprofessional Collaborative Practice; Leadership Development; Team-based Care; Practice Transformation; Qualitative

Introduction

The development of interprofessional collaborative practice (IPCP) environments is key to achieving the Institute for Healthcare Improvement Quadruple Aim of improving patient experience, work life of health-care providers, and population health while reducing cost (Bodenheimer & Sinsky, 2014; Brandt, 2015). IPCP environments— characterized by effective team communication, patient-centered coordinated care, and shared responsibility —are posited to improve health outcomes, patient experiences, and work satisfaction of healthcare professionals (Reeves, Lewin, Espin, & Zwarenstein, 2010). While there is general consensus on the need for IPCP, the implementation of team-based care to support IPCP is not well articulated in the literature (Baik et al., 2018; Weaver, Dy, & Rosen, 2014).

Developing effective team-based care requires a systematic, multipronged approach, including the development of leaders to champion, implement, and sustain IPCP (Interprofessional Education Collaborative, 2016). This paper reports findings from a qualitative study conducted to explore the influence of leadership development workshops in facilitating practice transformation through developing and implementing structured interprofessional bedside rounds (SIBR) in an acute care setting. This study is part of a larger intervention project designed to systematically build an IPCP environment within an advanced heart failure (AHF) service at a large academic medical center in the Pacific Northwest (Zierler, Abu-Rish Blakeney, O'Brien, & IPCP Heart FailureTeam, 2018).

Background

A leading cause of hospital admission and readmission, heart failure (HF) is one of the most common chronic illnesses and was responsible for 1 out of 9 deaths in the United States in 2009 (Mozaffarian et al., 2016). An estimated 5.7 million adults in the United States have HF (Avery et al., 2012; Mozaffarian et al., 2016), costing \$30.7 billion per year in health services, treatment costs, and missed work days (Heidenreich et al., 2013). Treatment costs of HF alone exceed that of any other Medicare diagnosis (Titler et al., 2008). Given the burden HF imposes on the healthcare system, implementing IPCP environments to efficiently manage this costly chronic illness is crucial.

Despite a large body of literature on the impacts of teamwork in healthcare and patient outcomes, there is a paucity of research aimed at how to develop IPCP environments. Developing IPCP environments to support team-based care is a complex and time-intensive process that involves multiple levels of intervention. At the individual-level, healthcare professionals need to be aware of how their behavior contributes to team-based care. At the group-level, teams need training to function more efficiently and effectively, and at the systems-level, healthcare organizations must promote the adoption and sustainability of IPCP (Interprofessional Education Collaborative, 2016).

Leadership theories related to quality improvement in healthcare have mainly focused on individual leadership development (Forman, Jones, & Thistlethwaite, 2015). While individual development is essential to support positive changes in a healthcare environment, creating IPCP environments requires a focus on leadership and team development (Salas, DiazGranados, Weaver, & King, 2008; Schmutz & Manser, 2013). Interventions that support teamwork should include relational-, process-, organizational-, and contextually-focused activities that work synergistically to enhance teamwork and team-based care (Reeves et al., 2010). Intentional leadership training is necessary for individuals and teams to develop professionally and collaborate to create IPCP initiatives like SIBR (Joseph & Huber, 2015).

Despite growing evidence that IPCP is an effective approach for improving patient outcomes (Barceló et al., 2010; Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013), little data exists on ways in which intentional leadership training impacts the implementation and sustainability of IPCP-supportive environments (Joseph & Huber, 2015). This study begins to fill the gap by exploring the influence of leadership development workshops in facilitating practice transformation through SIBR implementation.

Parent project

The purpose of the parent project was to improve relational coordination (relationships and communication) and efficiencies of care for patients with AHF by developing a patient-centered IPCP model of care (Zierler et al., 2018). An academic-practice partnership between a school of nursing research team and an academic health center care team was established for the purpose of co-creating and evaluating an IPCP environment. The school of nursing team was comprised of academic researchers with expertise in IPCP, team science, and quality improvement. The healthcare team was comprised of clinicians, managers and clinical staff with expertise in managing AHF. The teams collaboratively developed the intervention focused on promoting teamwork, supporting mutual understanding across professions, fostering leadership, engaging patients and families, and improving care. The partnership leveraged the expertise of all with a shared goal of improving AHF care in an IPCP environment.

The overall project was guided by The Relational Model of Organizational Change and the Institute of Medicine (IOM) Interprofessional Learning Continuum Model.

The Relational Model of Organizational Change includes relational, work process and structural interventions to improve relational dynamics to improve team work performance (Gittel, 2009). The IOM model identifies the spectrum of learners from health professions students to practitioners, and acknowledges the levels and types of learning that occurs in formal and informal work place settings where there is interdependence. (Institute of Medicine, 2015). Principles from these frameworks were utilized to shape the parent project's approaches and activities. Activities included team trainings, leadership development, establishment of a patient and family advisory team, development of data-mart to enable outcome tracking, and system re-design (in the form of SIBR) to support IPCP. A Change Management Team comprised of stakeholders from three different groups was created: 1) AHF care team (e.g., representatives from each workgroup - including nurse managers, physician administrators, advanced practice providers, pharmacists, social workers); 2) TeamSTEPPS instructors; and 3) research team from school of nursing. In addition, an AHF advanced practice provider with dedicated full-time equivalent was hired as a clinical liaison between the AHF care team and research team to facilitate communication between groups.

The project activities utilized Liberating Structures—a set of interactive strategies—to facilitate group interactions and engage all members of a team (Lipmanowicz, H.; McCandless, 2014). Team training content included the TeamSTEPPS' framework and communication tools which is an evidence-based strategy for improving healthcare team performance that includes assessing the need for change, training, implementation, and sustainment (Agency for Health Care Research and Quality, 2019). The context-specific experiences reported here are valuable to understanding participant experiences that cannot be captured in traditional quantitative strategies and may have implications for transferability and scalability of similar IPCP initiatives (Lutfiyya, Brandt, Delaney, Pechacek, & Cerra, 2016).

Current study

This study reports on participants' perceived impact of 12 workshops (Table 1) held over the course of the parent project period from 2014–2017 on creating an IPCP environment. The aim of the workshops was to support the Change Team and other emerging leaders in the AHF care team in their individual and team leadership development, while helping to facilitate specific areas for change in support of an IPCP environment. Topics for the workshops were co-created by the Change Team, who identified the AHF care team's needs which ensured that they remained problem-focused and grounded in the experiences of the AHF care team. The first workshop was an intensive 1.5-day introductory workshop on Relational Coordination as the conceptual framework guiding the project (Gittell, 2009). Subsequent topics for the other leadership workshops included content and practice using Liberating Structures, coaching, and change management skills (Table 1) (Lipmanowicz, H.; McCandless, 2014; Nelson, Batalden, & Godfrey, 2009). Workshop dates and times were planned 90 days in advance so that the AHF care team could arrange clinic schedules around the workshops. The workshops were held quarterly and lasted between 1.5 – 4 hours. Workshop invitations were extended to key stakeholders and AHF care teams. Participation was voluntary.

During the first several workshops, the AHF Change Team came to the consensus that the implementation of SIBR and TeamSTEPPS training would improve IPCP and address Relational Coordination challenges. The goal of SIBR is to promote a shared mental model, situational awareness, mutual trust, adaptability, and team performance by utilizing structured closed-loop communication and encouraging all members of the care team to take leadership roles in monitoring performance, providing feedback, and solving problems (Cao et al., 2018; Pannick et al., 2015). SIBR was a change in process and structure for the AHF care teams as historically, they had rounded in conference rooms or hallways without all members of the care team and without patient and family members present. Workshops then proceeded to focus on developing an implementation plan, training, and sustainability of the practice transformation.

Methods

Research Design

Using a qualitative design, semi-structured interviews were conducted to explore reactions to, and perceptions, of workshop participation on personal leadership growth, its impact on team functioning, and the overall IPCP environment. An exploratory approach is warranted when the goal of the research is to better understand participant views of an experience about which little empirical evidence exists. Individual interviews were conducted to permit deep individual reflection and allow participants to derive meaning from their experiences in a private environment (Bernard & Ryan, 2010). Further, individual interviews afforded the psychological safety needed for deep reflection.

Participants from an array of professions with roles on the AHF care teams (e.g. registered nurses (RNs), advanced registered nurse practitioners (ARNPs), medical doctors (MDs), social workers, and technologists) who attended a minimum of four leadership workshops

were invited to participate in the study. Email invitations were sent to all eligible participants with follow-up emails two weeks later. Interviews were held at a place, date, and time that was convenient for each participant. Interviews were conducted six months after the last workshop.

Ethical Considerations

The study was reviewed by the University of Washington Institutional Review Board (#00002897) and deemed exempt from human subjects review.

Data Collection

A semi-structured interview guide (Appendix A) was used to ensure that the interviews remained focused on the study purpose to understand how workshop participation may have influenced the creation of an IPCP environment. Thus, interview questions reflected both the overall parent grant purpose to support the development of a team-based IPCP model of care as well as the goal of the workshops to provide leadership training. Our team conceptualized possible influences as occurring in the individual personally, with their interactions with others, how their team functions, and among the AHF service overall. Questions were created to reflect these four areas. In advance of the interview, participants were provided an overview of the workshops they attended to enable reflection upon their experiences ahead of the interview. Interviews began with an overview of the study purpose and participants were asked to identify specific workshops that were most impactful to them. Participants were reassured that responses were confidential. Interviews lasted 30–60 minutes, were audio-recorded, and transcribed. Interviews were conducted by two trained interviewers (MW & NW).

Data Analysis

Analysis of the interview data was conducted using content analytic techniques as described by Erlinsson and Bryseiwicz (2017). To prepare for data analysis, authors (MW & EAB) read three qualitative methods articles (Elo & Kyngäs, 2008; Erlingsson & Brysiewicz, 2017; Hsieh Shannon, Sarah E, 2005) and completed an exercise using an excerpt from sample text unrelated to the present study to confirm consistency in coding techniques (Erlinsson & Bryseiwicz, 2017). After agreeing on code definitions and their applications, the authors independently reviewed interview transcripts in their entirety to obtain an overall sense of the data. To verify analytic reliability, authors randomly selected three transcripts and independently coded participant responses as meaning units for each interview question. Discrepancies were minimal and were resolved through dialogue and transcript review until consensus was reached by the coders (MW & EAB).

The remaining interview transcripts were analyzed using the same process. Using a deductive analytic method consistent with content analyses (Elo & Kyngäs, 2008), meaning units were organized by interview question to ensure data were grouped together to reflect the four conceptualized types of impact: 1) individual; 2) individuals interactions with others; 3) team functioning; and 4) the AHF service. Through group discussion, data were sequentially condensed and abstracted to higher levels to create the final thematic categories for each type of conceptualized impact. The iterative comparative analysis resulting from the

discussions facilitated greater understanding of participant experiences at each level and allowed the authors to capture the latent meaning in the data (Erlingsson & Brysiewicz, 2017). Rigor was established through independent review by the third coder (NW) who reviewed and provided thematic consensus. This step strengthened trustworthiness and provided another layer of credibility.

Findings

Findings are organized by interview questions: 1) individual; 2) individuals interactions with others; 3) team functioning in their area; and 4) AHF service. Within each type, similar themes were identified but were expressed differently depending on the level or context of the question (Table 2).

Participants

Among the 50 individuals who attended workshops, 24 met the inclusion criteria. Although all 24 individuals agreed to be interviewed, response and scheduling challenges resulted in a final sample of 16 (66.7% participation rate). The 16 participants represented a wide array of healthcare professions including RNs (n=7), MDs (n=3), ARNPs (n=3), social worker (n=1), and EKG technician (n=1). Participants attended a range of 4–12 workshops and identified as Change Team members (n=8) and key leaders (n=8), including three participants who identified as both. One participant who attended only three workshops was included because of their critical leadership in the early stages of the parent project.

Workshops

Almost all participants identified workshops that focused on learning how to coach others, promoting effective dialogue, and understanding high reliability organizations as being the most impactful (Workshops 2, 4, 8 & 11; Table 1). Ten of the 16 participants also attached high value to the workshops that highlighted team progress and problem-solved implementation challenges. Workshops that received the lowest levels of endorsement were the two focused on theory - Relational Coordination reinforcement (n=2) and change management theory sessions (n=2).

Impact of workshops on the individual

Four thematic categories emerged as participants discussed the ways in which participation in leadership workshops impacted them as individuals: 1) providing structure, 2) expanding their repertoire of knowledge and skills, 3) widening perspective, and 4) behavior change.

Providing structure.—In general, participants discussed how the workshops provided a forum in which to reflect and learn what other providers were doing in IPCP. For some, attending the workshops led to the discovery of new interests while for others, the workshops provided the mental and physical space in which to think about leadership and practice skills. As one participant noted, “[the workshops] allowed me to understand the goals, the mission, and some of the immediate concepts to work on...and allowed me to appreciate how much more that we could do for the future.” (Interview #5)

For others, the workshops provided the structure to interact in ways that would have not otherwise been possible. For example, one participant stated, *“I kind of just like to live in my little bubble. And so, I think this was a really good way for me to engage with more of the physicians.” (Interview #2)*

Expanding My Repertoire.—For many participants, the workshops expanded their own repertoire of knowledge and skills of IPCP. They described acquiring specific knowledge about leadership and change management as well as gaining concrete skills, such as active and reflective listening. One participant described the ability to create their own vision as a leader based on what they learned:

So I would say that it’s definitely helped me grow...[and]...understand where people are coming from, [to] stop and assume positive intent, and realizing that everyone’s here to do the right thing. And not necessarily everybody needs to be a leader...So, it’s helped create my vision as well. (Interview #9)

Another participant described how they discovered that a more effective approach to change was to influence outcomes rather than focusing on changing people. Knowledge was also described conceptually—for example, participants grew to understand the value of social relationships and multiple (and dissenting) perspectives as essential to effective problem solving. Participants described expanding their repertoire of specific skills. For example, they described appreciating the opportunity to learn how to run effective meetings, how to manage conflict, how to approach problem solving from a stance of inquiry, and learning how to coach others. As one participant noted, *“Every time you do these kinds of things, it helps you do some self-assessment and self-awareness...it’s made me grow as a manager and gave me some tools to fall back on.” (Interview #1)*

Widening Perspective.—The majority of participants described how participating in the workshops led to a change in their view or perspective about teams and the healthcare system. One participant stated that being in a room with other professions within their team gave them perspective that they had otherwise not had and developed a deeper appreciation of the value of interprofessional training and care:

The workshop helped me a lot to get a better idea of the value of the relational coordination approach. We would and will do a better job if we understand what one another’s roles are and how we can work together to achieve an aligned goal....it has helped me gain a better understanding of the practical value to high-functioning interdisciplinary teams. (Interview #3)

Another participant said, “the workshops helped broaden the way I look at things which was helpful in this complex environment...I don’t think I would be as successful at my job if I had not participated in these workshops.” (Interview #1)

The notion that not all individuals have similar levels of confidence in certain skills was reinforced in one participant who stated, *“After attending this, I found that people weren’t so comfortable with dialogue. It was like, ‘wow, why not?’ So that was kind of an eye-opener for me.” (Interview #16)*

Behavior change.—For many participants, the workshops led to changes in actual behavior. Participants discussed developing more confidence to lead and being more comfortable with silence as a means to lead. Becoming more patient, better able to anticipate challenges, and changes in workstyle were also identified. Several participants commented on the workshops contributing to their discovery of their “voice,” as reflected in the following, *“I feel like I have more of a voice to encourage that [consistency in practice], that I didn’t necessarily feel like I had before we did this. And trying to hold others accountable [in] that practice.” (Interview #8)*

Not all participants were impacted by the workshops as one participant notes:

I think the workshops themselves didn’t really impact me all that much.... I was coming from the perspective of how I can be part of the team but also play a role in trying to influence what I felt may be obstacles....from that perspective these workshops were really more for me to potentially learn a little bit more about behaviors, human management. (Interview #5)

Similarly, another participant stated, *“I’ve gotten better at being assertive and able to call out a situation that might not be right or identify a problem, work towards solving the problem—but I think this is more of a function of growth in role and aging as opposed to learning skills from workshops with the exception of TeamSTEPP.” (Interview #8)*

Impact of workshop on interactions with others

Similar themes of structure, repertoire expansion, widening perspectives and behavior changes were evident in responses related to interactions with others.

Providing structure.—For several participants, the workshops served a functional role to allow individuals to interact differently with others in ways that facilitated relationship building and eventually supported a sense of team. One participant said, *“...it’s just allowed better personal-- ...you know my name, you kind of know where I’m at, you know what I’m working for, and allows me to reach out to people a little bit more comfortably. And it has helped develop a couple relationships [to] become a lot stronger.” (Interview #2)*

The workshops also created safe spaces and served as “booster” sessions where participants could be reminded of their team goals, what they wanted to work on, their progress and areas for improvement. As one participant noted when discussing how their relationship with the team has evolved, *“[The workshops are] helpful as a reminder of why you’re there, why you’re doing the things the way you’re doing it. So I think it has helped ... maintain a culture, really. I think that’s a key thing. Because it’s so easy to fall back into old patterns.” (Interview #14)*

Participating in the workshops also produced a shared language that allowed individuals to understand how to communicate more effectively:

We always kind of say, “Well, we need the ICU because of nursing care.” Well, what does that mean? So I think that [the workshops] has helped bring that, ‘how

do we share information in a sort of similar language?’ That [the workshops] really helped to build how we speak and share concerns. (Interview #2)

Expanding My Repertoire.—Participants also discussed how the workshops helped them to develop skills in communication that facilitated more effective interactions with others, particularly when managing conflict. When prompted for an example, one participant noted:

I was trying to be an advocate first like, we need to hear both sides of the story before we make a determination about what’s what.....so I said, ‘you need to understand how she feels. You may not agree with it but that how she feels and she has every right to feel that way because those are her feelings’. (Interview #12)

Another participant described learning to adopt an appreciative inquiry stance in working with others in potentially contentious situations, *“Now, before I go in, I anticipate it, which is really good. It’s like you just think, “I have to practice this, just like I have to practice anything else. So I have to get myself in a stance of inquiry, asking questions, being curious. And I don’t think I had that tool.” (Interview #4)*

Widening My Perspective.—Participants described developing a better perspective on how to interact with others, particularly in relation to understanding how to provide effective care, as evidenced by the following, *“It makes me stop and try to listen to people rather than just sit in my corner and looking at how things are going just from my perspective, It made me be able to look at the bigger picture better.” (Interview #11)*

When describing how participating in the workshops impacted their interactions with others, one participant stated, *“It made it easier for me to lead because it opened up everybody’s thoughts and ideas as to why it’s important that we all get on the same ship.” (Interview #1).* On the other hand, one participant noted. *“Probably not substantially. I’ve learned something from every one of these workshops. I don’t know. I’ve been exposed to some of this previously, so I don’t know that I could identify anything that my style has changed substantially on.” (Interview #3)*

Workshops also helped participants understand that team-based care was predicated on the assumption that all team members have equally valuable contributions to make toward the care of the patient, *“It makes me feel like it’s important that every member on the team feel we’re all pretty much equal, and we all have contributed to what’s going on with the patient and be able to learn from each other.” (Interview #11)*

Behavior Change.—Participants also discussed behavioral changes in how they interacted with others. Participants discussed being less quick to react to others, and managing and talking to other team members differently. One participant described the inclusion of nurses in rounds produced more efficiencies in communication:

I think the major difference is the nurses. It used to be, we are talking about a patient outside. And then we go in, and talk to the patient, and do our stuff. And then usually, the nurses are not there...Now they’ll come in. They will share with us what happened in the last 24 hours. I think it’s a lot more efficient and there’s

more direct communication...and the patient feels included. We have learned to talk in more common ways.” (Interview #11)

Another noted, *“I’ve learned to manage differently. Trying to hear and listen better and to be more collaborative with staff rather than say, ‘This is what we need to do and this is how I’d like to see it done’.* (Interview #1)

Impact of workshop on team functioning

When asked about how the workshops have impacted the team as a whole, participants described the influence of workshops as providing opportunities and changing behaviors. Within the theme of providing opportunities, two second-order themes were noted: providing opportunities to *learn* together and opportunities to *practice* together through the implementation of SIBR.

Providing Opportunities.

Workshops as opportunity to impact team by learning together.: Attending the workshops facilitated the development of ideas and processes that were supported by the collective whole. For example, participants stated that the workshops allowed team members to develop and articulate shared goals, enhance mutual respect and develop the critical relationships needed to foster teamship. Workshops also provided the psychological safety for conversations about perceptions and attitudes to occur.

Having the workshop with the nurses, and teletechs and then getting to know them more on a social level. I think there’s a lot more interaction going both ways....when you go into a workshop with somebody...then you get to know people more on a personal level...getting to know people on a personal level makes it a lot easier to work with people as a group, because you’re like “oh yeah... hey ..., I remember you. (Interview #7)

Workshops as opportunity to impact team by practicing together: Participants also discussed team functioning in the context of practicing and integrating SIBR and TeamSTEPPS in the clinical setting. The majority of participants noted that team communication had improved because of attending workshops and practicing together. One participant rated the amount of change in communication, *“There’s a much more heightened awareness of communication amongst the teams. I see it. I’m not going to pick out names. That’s dangerous. But, yeah, I have specific examples. If I had to say on a zero to 10 scale, three years ago, the communication was probably at a three and I’d say it’s edged up towards a six or seven.”* (Interview #15)

Participants also stated that SIBR supported increased engagement among the care team and better responsiveness to patients.

[T]hings have gotten much better, I think, because the nurses that are part of the patient care, the whole nursing staff ...are starting to familiarize themselves on what multidisciplinary rounding means. So I can tell now, since we started, there’s clearly a different mentality. And clearly there has been improvement in communication, in terms of the goals of the patient and what would get the patient

through the hospitalization, and then also nursing not being afraid of asking for clarification. Whereas before, we never had that one-on-one process. (Interview #5)

Several participants reported that the inconsistent attendance at the workshops by some members and administrative leadership was disheartening to the team's efforts. However, their absence was not necessarily a barrier but rather impacted the degree of change, as one participant stated,

"I mean we implemented a process, and we've made it the standard of culture so we were effective. But I think ...they [leaders] didn't attend the change teams regularly enough or really make it their own. They just kind of dropped in and made their opinions known every once in a while. But how can you say we weren't effective when we implemented a huge culture change, and made it happen, and people like it, and are doing it. But I think we could've been more effective had we had that representation from leadership." (Interview #7)

Engaging in SIBR also helped reinforce communication processes that were initially begun in the workshops, *"Rounding gave them a chance to be in the room with the nurses and have good interactions, and really talk about what their expectations were. And foster that, 'We're working together' vs 'Why didn't you do this?'... [T]here's a lot more just back and forth, and going into the team room and talking about stuff, and engaging."* (Interview #2)

Behavior Change.—In addition to describing the workshops as an opportunity to learn and practice skills, participants described the impact of workshop participation in terms of behavior change within the team. Many described having fewer silos and being friendlier to one another.

"I see a lot of back and forth....the other day one of the new [providers] didn't know how to do something. And one of [us] is like, 'Well, I haven't really done that either but let's go over and look at my patient's chart who had that. Let me help you.' I think there's more of that. A couple of physicians when we've had issues have been like, 'Can you come in and round with us and be a part of that?'." (Interview #2)

Impact of workshops on organizational systems

Changes in structure, increased system-wide awareness, and a culture of collaboration were the three categories that emerged from participant responses relative to system impact.

Changes in Structure.—Participants identified systems-related changes as an outcome of the change to SIBR. Specifically, participants identified how the teams were now co-developing processes, initiating a practice council, and changing how meetings are structured. In addition, one participant described the "spread" of SIBR to other services:

"We've instituted the structured rounding process to a broader group within the service. When we started the [service], we actually started with rounding. It was an organizational expectation right out of the gate. Now we are trying to spread it to [another service]." (Interview #14)

Increased awareness.—In addition to changes in structures, increased awareness throughout AHF services was another theme that emerged from the interview data. In contrast to increased awareness at the individual level, responses reflected a commitment to implement SIBR across other units, and an overall interest in high reliability organizations throughout the organization. In addition, one nurse noted that the project influenced overall nursing practice, *“I think this whole process really elevated the way nurses felt about their practice which I think is really great. And I think having a model of a good working relationship with others when SIBR works well...they see that and feel that. They want that all the time. So especially when it doesn’t happen, they feel a loss.”* (Interview #2)

Conversely, one participant noted that although silos still exist in the system, participating in the workshop has made them more aware overall when there is a lack of teamship. For example, they stated, *“...they march to their own drummer...And they’re not on board... It makes the rest of the teams not want to interact with them because they’ve put themselves so far out there--that’s not where we want to be.”* (Interview #12)

Culture of Collaboration.—The theme of collaboration at a level beyond the AHF service was evident in the data. As one participant noted, *“When you think of it system-wise, I see the [providers] want to be collaborative with the bedside nurse... usually you were sort of the invisible member of [the team].”* (Interview #10)

Implementing an IPCP environment contributed to a culture shift as one participant stated, *“The workshops were helpful at helping reinforce the creation of a culture where we are trying to communicate effectively and the guiding principles behind how we are trying to work together.”* (Interview #1)

Participants also described a greater understanding that collaboration likely influences patient outcomes. Participants noted a feeling that silos were reduced, more frequent bi-directional communication was occurring across all the AHF teams, and there was a greater energy around holding strategic conversations to improve organizational systems, *“There’s a much more heightened awareness of communication amongst the teams....there is much more collaboration. I don’t think that was the case four years ago.”* (Interview #16)

When talking about SIBR in particular, a participant stated, *“It’s actually really improved the sense of team....it’s been so great to see some really key physician leaders come to the table and really co-lead that work. I just think things are really changing.”* (Interview #13)

Discussion

This study aimed to explore participation in a longitudinal series of leadership development workshops and its influence on the development of IPCP in AHF care teams at a large, academic medical center in the Pacific Northwest. Specifically, the focus was on the impact on the professional development of the individual self, interactions with others, team functioning, and organizational systems. Findings from each of these categories coalesced around similar domains, with slightly different descriptions of impact at individual and team levels. For example, at the individual level, workshops facilitated individual reflection and self-discovery, while at the team-level, they provided an opportunity work together,

communicate with one another, and practice skills to apply in practice. These differences highlight and confirm that the workshops were impactful at multiple levels and contributed to a culture of collaboration.

Current literature on leadership development is predominantly focused on the individual and how to support him/her in working with others to create change (Forman et al., 2015). Our findings indicate that leadership workshops are also impactful at the team level, by helping teams gain a shared mental model, engage in shared decision-making, and create a shared language, characteristic of high-functioning teams (Salas & Rosen, 2013; Vogus & Singer, 2016). The results support other research indicating leadership development workshops are more effective at initiating change involving practice at the team level when approached at the dual levels of individual and group development (Salas et al., 2008). In this study, leadership workshops became an opportunity for participants to learn skills and build relationships with one another, to which almost all participants attributed the change's success. Through participation in the workshops, the relational capacity of core participants improved, leading to mutual respect, shared goals, and enhanced communication, consistent with Relational Coordination principles guiding the intervention.

The longitudinal nature of the workshops fostered teamsmanship that was critical to the successful implementation of SIBR. Participants discussed the value of offering workshops consistently over time in keeping them focused and sustaining progress. The workshops served as “boosters” and as coaching sessions by providing the structure in which to come together and build systematically upon previous work. By addressing knowledge and skill needs and supporting group reflection repeatedly, change was more organic and realistically paced. Additionally, participation allowed individuals to gain an awareness of themselves in relation to others which facilitated meaningful behavior adaptations, resulting in sustained practice change efforts over time.

Findings indicate that barriers continue to exist at the system level when trying to institutionalize practice change. Specifically, participants reported that despite statements of leadership support, endorsements of practice change did not always translate into action. Engagement at a system level to support IPCP environments continues to be difficult in the face of priorities and demands competing for time, energy, and resources. Results suggest that the leadership workshops were helpful in mitigating some of the challenges, but more intensified efforts to engage organizational systems to commit to practice changes are needed.

In addition to increasing understanding of how leadership development is impactful on facilitating practice change, findings also highlight features of the workshops that are important to consider in future efforts. All participants valued the highly interactive nature of the workshops through the use of Liberating Structures, underscoring the importance of thoughtful and engaging strategies in delivering content. Almost all participants valued the topics focused on skill building in communication and change implementation as well as “real-life” lessons learned from others to inform how to manage and sustain their own change process. Importantly, participants appreciated the opportunities to highlight their

progress as a means to sustain themselves. These components serve as a model for change when developing collaborative practice in clinical settings.

Academic-practice partnerships are critical in building and evaluating sustainable models of team-based care (Beal et al., 2012; Everett, 2012). In this project, the academic side of the partnership provided the training and coaching needed that in turn, ensured we met the needs of the clinicians and practitioners by helping us understand their experiences and challenges. By remaining problem-focused and relevant, participants left every workshop with skills that could be directly applied in practice. Further, our commitment to flexibility in selecting topics and delivery methods, based on the needs of the team, contributed to the mutual trust developed between the research team and practice-based clinical teams. By leveraging our respective strengths, co-creating the workshops, and being adaptable to the changing needs of the team, we were able to be successful and sustain progress. Our partnership was an operationalization of a bridge between academia and practice where each partner informed the project's work and created a mutually beneficial learning community.

Our findings have several implications for others engaging in practice transformation efforts in clinical settings. First, the co-creation of the workshops was a key component to reinforcing team development. By working with the AHF Change Team to identify topics for subsequent workshops and strategizing on how to address challenges occurring in the clinical setting, they gained a greater sense of ownership. Second, a plan that allows for identification of the change, followed by an immersion coaching workshop and topics that were specifically relevant to the AHF care team may be a more efficient strategy in effecting change than a set longitudinal curriculum. Third, delivering workshops over time may also be a more cost-efficient way to support leadership development when instituting change, compared to intensive but less frequent leadership training. By allowing time in between workshops, the team was able to practice skills learned, recognize challenges and successes, and then identify areas for further work. Importantly, this project, rooted in the Relational Model of Organization Change, the IOM Interprofessional Learning Continuum model and Liberating Structures, facilitated the development of a learning community characterized by shared knowledge, psychological safety, and sense of teamwork. This model permitted meaningful reflection, likely positively influencing the sustainability of the change process.

Last, working *within* the existing hierarchical structures that are inevitable in academic health centers may result in more realistic change over time. Issues of hierarchy and power gradients have contributed to many of the challenges of delivering team-based care and must be addressed when facilitating IPCP. Focusing solely on *recognizing* areas of hierarchy and discussing ways to address power in abstract ways is insufficient to effect actual change. In addition to acknowledging issues of power and hierarchy, practice change efforts should focus equally on strategies that support team-based care within existing hierarchical structures. To do this, our team chose to cultivate front-line champions from all professions on the team so that everyone—regardless of perceived status—owned a piece of the change process. Further, using TeamSTEPPS training and SIBR as a structured intervention to build and promote IPCP provided a common language used by all team members and ensured a safe and collaborative environment.

Several limitations must be noted when interpreting the interview data. We interviewed only participants who attended four or more workshops in order to capture and understand the impact of multiple workshops over time. This resulted in a mix of inpatient and outpatient clinicians as well as clinical and section administrators. While this heterogeneity represented the group with whom we worked over time, findings are likely diluted as the administrators and outpatient care team members were not as involved on a daily basis in SIBR. However, while several participants remarked on the intermittent attendance of several leaders, all felt that their absence simply slowed down change, rather than impeded it. In addition, participants changed roles within the AHF units, thereby possibly altering their perspectives. Importantly, participation in the workshops varied over time. While a core group of individuals on the Change Team participated consistently, other members of the team fluctuated in their participation, limiting the ability to interpret the strength of group-level impacts. Participants were interviewed once and thus, findings represent perceptions of interviewees at one point in time. Leadership development is a process that occurs gradually, and responses and perceptions about the impact of the workshops may change over time. Longitudinal interviews may be beneficial in understanding the trajectory of change in future research. Methodological limitations include those related to generalizability and objectivity of the data. Importantly, multiple approaches were utilized to support the development of IPCP (e.g. leadership workshops, TeamSTEPPs training, departmental reminders), all of which likely had an impact; it is difficult to isolate the leadership workshops as the solo impactful intervention. Despite these limitations, the findings provide insight into the utility and value of incorporating leadership development workshops into practice change efforts to affect meaningful change.

Conclusion

This study provided an in-depth examination of the impact of intentional leadership training on the development of an IPCP environment to improve AHF outcomes in a large, academic medical center. Findings indicated that leadership workshops are an important aspect of interventions aiming to facilitate practice transformation. Future research is needed to identify and quantify components of team interventions necessary for successfully sustaining collaborative practice, and interventions to improve system-level support of IPCP are necessary. Examinations that further explore how multi-pronged team interventions impact individuals (provider/staff satisfaction, work absenteeism, morale, patient/family satisfaction), quality of care, and patient outcomes are also needed. Understanding interpersonal processes, such as how roles are negotiated within teams and how professionals perceive and understand team-based care, is also important to articulating how team-based care can be operationalized. Results from this study highlight the importance of leadership development within care teams and provide a foundation from which to successfully implement IPCP.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

References

- Agency for Health Care Research and Quality. (2019). About TeamSTEPPS. Retrieved March 11, 2019, from <https://www.ahrq.gov/teamstepps/about-teamstepps/index.html>
- Avery CL, Loehr LR, Baggett C, Chang PP, Kucharska-Newton AM, Matsushita K, ... Heiss G (2012). The population burden of heart failure attributable to modifiable risk factors: The ARIC (atherosclerosis risk in communities) study. *Journal of the American College of Cardiology*, 60(17), 1640–1646. 10.1016/j.jacc.2012.07.022 [PubMed: 23021327]
- Baik D, Abu-Rish Blakeney E, Willgerodt M, Woodard N, Vogel M, & Zierler B (2018). Examining interprofessional team interventions designed to improve nursing and team outcomes in practice: a descriptive and methodological review. *Journal of Interprofessional Care*, Advance on, 1–9. 10.1080/13561820.2018.1505714
- Barceló A, Cafiero E, De Boer M, Mesa AE, Lopez MG, Jiménez RA, ... Robles S (2010). Using collaborative learning to improve diabetes care and outcomes: The VIDA project. *Primary Care Diabetes*, 4(3), 145–153. 10.1016/j.pcd.2010.04.005 [PubMed: 20478753]
- Beal JA, Alt-White A, Erickson J, Everett LQ, Fleshner I, Karshmer J, ... Gale S (2012). Academic Practice Partnerships: A National Dialogue. *Journal of Professional Nursing*, 28(6), 327–332. [PubMed: 23158195]
- Bernard HR, & Ryan GW (2010). Semistructured interviews In Russell Bernard H, Wutich AY, & Ryan GW (Eds.), *Analyzing qualitative data: Systematic approaches* (2nd ed., pp. 29–33). Thousand Oaks: Sage.
- Bodenheimer T, & Sinsky C (2014). From Triple to Quadruple Aim: Care of the Patient Requires Care of the Provider. *Annals of Family Medicine*, 12(6), 573–576. 10.1370/afm.1713 [PubMed: 25384822]
- Brandt BF (2015). Interprofessional Education and Collaborative Practice: Welcome to the “New”; Forty-Year Old Field. Champaign Retrieved from <http://www.naahp.org/Portals/2/OtherImages/TheAdvisor/Articles/35-1-02.pdf>
- Cao V, Tan LD, Horn F, Bland D, Giri P, Maken K, ... Bryant Nguyen H (2018). Patient-Centered Structured Interdisciplinary Bedside Rounds in the Medical ICU. *Critical Care Medicine*, 46(1), 85–92. 10.1097/CCM.0000000000002807 [PubMed: 29088002]
- Elo S, & Kyngäs H (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. 10.1111/j.1365-2648.2007.04569.x [PubMed: 18352969]
- Erlingsson C, & Brysiewicz P (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93–99. 10.1016/j.afjem.2017.08.001 [PubMed: 30456117]
- Everett L et al. (2012). Academic-practice partnerships fuel future success. *Journal of Nursing Administration*, 42(12), 554–556. <https://doi.org/DOI: 10.1097/NNA.0b013e318274b4eb> [PubMed: 23151926]
- Forman D, Jones M, & Thistlethwaite J (Eds.). (2015). *Leadership and Collaboration: Further Developments for Interprofessional Education*. U.K.: Palgrave Macmillan 10.1057/9781137432094
- Gittell JH (2009). *High Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience*. New York: McGraw-Hill.
- Heidenreich PA, Albert NM, Allen LA, Bluemke DA, Butler J, Fonarow GC, ... Trogon JG (2013). Forecasting the impact of heart failure in the united states a policy statement from the american heart association. *Circulation: Heart Failure*, 6(3), 606–619. 10.1161/HHF.0b013e318291329a [PubMed: 23616602]
- Shannon Hsieh, Sarah E, H.-F. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. 10.1177/1049732305276687 [PubMed: 16204405]
- Institute of Medicine. (2015). *Measuring the Impact of Interprofessional Education on Collaborative Practice and Patient Outcomes*. Board on Global Health; Institute of Medicine. Washington DC: National Academies Press Retrieved from http://www.nap.edu/catalog.php?record_id=21726
- Interprofessional Education Collaborative. (2016). *Core competencies for interprofessional collaborative practice: 2016 update*. Washington DC Retrieved from <https://nebula.wsimg.com/>

2f68a39520b03336b41038c370497473?
AccessKeyId=DC06780E69ED19E2B3A5&disposition=0&alloworigin=1

- Joseph L, & Huber DL (2015). Clinical leadership development and education for nurses: prospects and opportunities. *Journal of Healthcare Leadership*, 7, 55–64. 10.2147/JHL.S68071 [PubMed: 29355179]
- Lipmanowicz H; McCandless K (2014). *The Surprising Power of Liberating Structures: Simple Rules to Unleash A Culture of Innovation*. Seattle: Liberating Structures Press.
- Lutfiyya MN, Brandt B, Delaney C, Pechacek J, & Cerra F (2016). Setting a research agenda for interprofessional education and collaborative practice in the context of United States health system reform. *Journal of Interprofessional Care*, 30(1), 7–14. 10.3109/13561820.2015.1040875 [PubMed: 26230379]
- Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, Blaha MJ, Cushman M, ... Turner MB (2016). Heart disease and stroke statistics-2016 update a report from the American Heart Association. *Circulation*, 133(4), e38–360. 10.1161/CIR.0000000000000350 [PubMed: 26673558]
- Nelson EC, Batalden P, & Godfrey M. (2009). *Quality by design*. San Francisco: Jossey-Bass.
- Pannick S, Davis R, Ashrafian H, Byrne BE, Beveridge I, Athanasiou T, ... Sevdalis N (2015). Effects of interdisciplinary team care interventions on general medical wards: A systematic review. *JAMA Internal Medicine*, 175(8), 1288–1298. 10.1001/jamainternmed.2015.2421 [PubMed: 26076428]
- Reeves S, Lewin S, Espin S, & Zwarenstein M (2010). *Interprofessional Teamwork for Health and Social Care*. Oxford: Wiley-Blackwell.
- Reeves S, Perrier L, Goldman J, Freeth D, & Zwarenstein M (2013). Interprofessional education: effects on professional practice and healthcare outcomes (update). *Cochrane Database of Systematic Reviews*, (3), N.PAG-N.PAG. Retrieved from <http://offcampus.lib.washington.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=ccm&AN=105837112&site=ehost-live>
- Salas E, DiazGranados D, Weaver SJ, & King H (2008). Does Team Training Work? Principles for Health Care. *Academic Emergency Medicine*, 15(11), 1002–1009. 10.1111/j.1553-2712.2008.00254.x [PubMed: 18828828]
- Salas E, & Rosen MA (2013). Building high reliability teams: progress and some reflections on teamwork training. *BMJ Quality & Safety*, 22(5), 369 Retrieved from <http://qualitysafety.bmj.com/content/22/5/369.abstract>
- Schmutz J, & Manser T (2013). Do team processes really have an effect on clinical performance? A systematic literature review. *British Journal of Anaesthesia*, 110(4), 529–544. [PubMed: 23454826]
- Titler MG, Jensen GA, Dochterman JMC, Xie XJ, Kanak M, Reed D, & Shever LL (2008). Cost of hospital care for older adults with heart failure: Medical, pharmaceutical, and nursing costs. *Health Services Research*, 43(2), 635–655. 10.1111/j.1475-6773.2007.00789.x [PubMed: 18370971]
- Vogus TJ, & Singer SJ (2016). Creating Highly Reliable Accountable Care Organizations. *Medical Care Research and Review*, 73(6), 660–672. 10.1177/1077558716640413 [PubMed: 27026686]
- Weaver SJ, Dy SM, & Rosen MA (2014). Team-training in healthcare: a narrative synthesis of the literature. *BMJ Quality & Safety*, 23(5), 359–372. 10.1136/bmjqs-2013-001848
- Zierler BK, Abu-Rish Blakeney E, O'Brien KD, & Teams IHF (2018). An interprofessional collaborative practice approach to transform heart failure care: An overview. *Journal of Interprofessional Care*, 32(3), 378–381. 10.1080/13561820.2018.1426560 [PubMed: 29338459]

Table 1.**Leadership Development Workshop Titles and Descriptions**

Leadership Development Workshop Series	
Workshop	Title
Workshop #1	<i>Improving Work Processes with Relational Coordination</i>
Overview of TeamSTEPPS tools and the Relational Coordination (RC) framework. Discussed what a RC intervention included, how to utilize RC data, and contingency and action plans.	
Workshop #2	<i>Promoting Dialogue: Compassionate Listening Skills for Developing Professional Relationships</i>
Two models for effective management of conflict were presented; AHF care teams guided through addressing real conflicts. Applied model during a simulated conflict with a standardized actor.	
Workshop #3	<i>Problem Solving with Liberating Structures</i>
Using Liberating Structures, identified structured interprofessional bedside rounds (SIBR) as the IPCP intervention. Also identified several TeamSTEPPS tools to be implemented.	
Workshop #4	<i>Coaching Teams</i>
Two-day intensive coaching workshop to coach interprofessional teams to improve team dynamics to achieve desired goals.	
Workshop #5	<i>Building High Performing Teams</i>
A panel discussion of lessons learned from other teams engaged with SIBR. AHF care team members problem-solved team performances challenges using Liberating Structures. Included how to engage team members, developing an understanding of effective communication techniques, and identifying strategies to implement immediately.	
Workshop #6	<i>The Switch to Interprofessional Rounds</i>
Presentation of a change management model "Switch" to focus AHF care teams efforts to implement SIBR. Participants refined their plan and process for SIBR and worked through anticipated challenges.	
Workshop #7	<i>TeamSTEPPS and Interprofessional Rounding</i>
AHF care team members attended one of five training sessions during which they learned the new SIBR process and practiced team communication skills. TeamSTEPPS training was conducted and AHF care teams practiced the interprofessional rounding tools.	
Workshop #8	<i>Transforming Care: Teamwork and Partnerships</i>
Presentation on the differences between high-performing and poorly performing teams and tools known to improve team communication and functioning, followed by a panel discussion around how to determine success, identifying benchmarks to use in a change process, how to include the entire team, and how to ensure that efforts are sustained over time.	
Workshop #9	<i>Early Outcomes, Celebrations, & Next Steps for Heart Failure Care Teams</i>
Dissemination of follow-up data collected and celebration of accomplishments over the last year. Preliminary results of observational studies of the inpatient teams as they integrated briefs and SIBR into their daily routines were shared.	
Workshop #10	<i>Transforming Relationships for High Performance</i>
Relational Coordination (RC) was addressed to help reaffirm the need for standardization of tools and processes, with a focus on accountability and sustainability.	
Workshop #11	<i>What Makes an Organization Highly Reliable?</i>
Presentation on highly reliable organizations (HROs) followed by an interactive teamwork session where AHF care teams discussed sustainability and efforts to standardize SIBR.	
Workshop #12	<i>Standardizing, Sustaining & Scaling SIBR</i>
Key leaders and stakeholders came together to reflect on the last three years and further discuss how SIBR can be standardized, sustained and scaled up within the academic medical center.	

Table 2.

Summary of identified themes.

Themes	Sub-themes	Representative Quotes
Impact on Self	Providing Structure	"Because I had said, 'I'm paying for this, I'm signing up for this.' I could say to my clinic, 'There's three days I'm just not here.' And then it's kind of a freedom to then to go and be present."
	Expanding Repertoire	"It gave me some confidence in my leadership skills (and competence); this allowed me to express them more it also made me think more about healthcare delivery in the team setting and to frame it better when things weren't working as 'what's the issue with the team' and 'how can we build the team to be better.'"
	Widening Perspective	The workshops helped broaden the way I look at things in this complex environment."
	Behavior Change	"My working style changed because I quite physically took a step back to allow the work to be facilitated by the people on those teams."
Interaction with Others	Providing Structure	"The workshops were very helpful at helping reinforce a creation of a culture where we are trying to communicate effectively and that the guiding principles behind how we're organized is that we're trying to work together as a team."
	Expanding Repertoire	"And then I think it's something I'm probably a little better at, but not great, is how do you give feedback across the disciplines. And so, I think I've gotten better."
	Widening Perspective	"It's helped me have greater appreciation for their world and how do we engage."
	Behavior Change	"I try to make sure that everybody has a voice during meeting times and making sure that you're not specifically calling someone out, which I thought I did previously."
Team Functioning	Provide Opportunities	"Clearly there has been an improvement in communication. Whereas before we never had that one-on-one process. And so now that they're there in the room we could really address their issues."
	Behavior Change	"We don't write big whole complaining emails to one another anymore. We've decided that that's-- we're going to just reach out and ask to have a conversation and talk about it and then talk about it versus sending. I think it's allowed people-- it's given people permission to have conversations about perceptions, and about perceived attitudes, and those kinds of things."
Organization	Changes in Structure	"There really has been a commitment across the organization to implement more widely interdisciplinary rounding. So the CCU is doing it-- all of the ICUs are doing it, and it may not be in the same format as the SJBR. Certainly, oncology is looking at rolling it out, and the mother-baby units, labor and delivery."
	Increased awareness	"One of the things I learned is that the hospital is doing so many initiatives. And everybody's kind of working on the same thing but a little bit of a different process."
	Culture of Collaboration	"I think we're seeing things in more collaborative and interdisciplinary ways that I think as an organization, we here were very entrenched in silos. Nobody crossed over. Everybody was doing their own workflows as a parallel fashion. I think that's breaking down a little bit, I think there's been a lot of unfreezing and a little more cross-fertilization."